

Water-Data Report 2011

07228000 Canadian River near Canadian, TX

Middle Canadian Basin
Middle Canadian-Spring Subbasin

LOCATION.--Lat 35°56'06", long 100°22'13" referenced to North American Datum of 1927, Hemphill County, TX, Hydrologic Unit 11090106, on downstream side of bridge on U.S. Highways 60 and 83, 600 ft downstream from Panhandle and Santa Fe Railway Co. bridge, 1.2 mi downstream from Red Deer Creek, 1.6 mi northeast of Canadian, and 433.9 mi upstream from mouth.

DRAINAGE AREA.--22,866 mi² of which 4,688 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1924 to Aug. 1925 (gage heights only), Apr. 1938 to current year. Prior to Apr. 1938, monthly discharges only, published in WSP 1311.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Nov. 1959 to Apr. 1961, Aug. 1966 to Aug. 1994.

BIOCHEMICAL DATA: Nov. 1959 to Apr. 1961, Aug. 1966 to Aug. 1994.

BIOLOGICAL DATA: Oct. 1974 to Aug. 1994

PESTICIDE DATA: Oct. 1970 to June 1982.

PERIOD OF DAILY RECORD, Water-Quality.--

SPECIFIC CONDUCTANCE: Oct. 1974 to Sept. 1981.

WATER TEMPERATURE: Oct. 1974 to Sept. 1981.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,301.50 ft above NGVD of 1929. July 1, 1924, to Aug. 31, 1925, and Apr. 21 to Dec. 15, 1938, nonrecording gage; Dec. 16, 1938, to Sept. 30, 1953, Oct. 12, 1995, to Jan. 30, 1998, water-stage recorder and nonrecording gages; all at site 300 ft upstream at same datum. Satellite telemeter at station.

REMARKS.--Records good except those for Feb. 2-13, which are fair due to ice effect, and estimated daily discharges, which are poor. Since Oct. 1964, when storage began in Lake Meredith, at least 10% of contributing drainage area has been regulated. Extreme low flow is maintained by springs that enter river about 600 ft upstream from the gage. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 20.0 ft Oct. 2, 1904, from a local resident. Floods of May 2, 1914, and Oct. 5, 1923, reached stages of 12 ft from information furnished by the Chief Engineer Office of the Panhandle and Santa Fe Railroad Company.

07228000 Canadian River near Canadian, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	15	33	59	71	54	58	55	48	21	1.6	0.30	e0.96
2	15	33	61	69	48	57	54	48	21	1.3	0.41	e0.84
3	15	33	62	69	50	55	53	47	20	2.1	0.37	e0.72
4	16	33	61	69	57	56	52	45	19	5.7	0.33	0.59
5	16	33	62	70	72	54	51	44	19	5.0	0.28	0.42
6	17	34	63	69	81	55	53	42	17	3.7	0.44	0.31
7	17	35	63	69	71	56	52	41	16	2.2	0.51	0.37
8	17	36	64	69	68	60	51	39	15	1.2	0.58	0.35
9	17	36	64	70	e68	65	49	39	14	1.5	0.47	0.33
10	17	36	64	70	e69	65	48	41	15	1.7	0.39	0.30
11	17	36	64	68	69	64	49	42	16	1.3	1.7	0.33
12	17	185	63	65	79	62	48	42	14	0.89	11	0.29
13	18	165	63	64	112	60	49	41	12	1.5	13	0.30
14	18	122	63	65	96	59	49	41	11	9.0	11	0.30
15	18	93	65	66	91	60	48	39	12	5.8	9.5	0.33
16	19	82	66	66	87	61	47	38	10	3.5	8.4	0.35
17	19	74	69	70	83	62	48	36	9.3	2.2	8.0	0.67
18	19	72	76	75	76	59	47	38	9.5	1.3	7.9	1.3
19	19	71	78	76	72	58	47	36	8.4	1.1	6.4	1.3
20	19	68	77	74	72	58	46	35	7.2	0.69	5.5	1.4
21	23	66	75	72	66	57	47	34	7.3	0.36	5.6	e1.9
22	50	64	72	71	64	56	47	33	7.3	0.29	5.2	2.4
23	42	62	71	68	64	55	45	32	6.8	0.42	4.0	4.6
24	37	60	72	66	62	53	46	30	5.3	0.34	3.5	4.8
25	35	58	71	66	62	54	46	30	4.0	0.38	3.4	5.1
26	35	58	70	65	63	52	46	29	3.6	0.46	2.8	4.9
27	33	59	71	66	62	52	59	28	2.9	0.30	2.0	4.9
28	32	59	71	66	60	53	62	26	3.0	0.35	1.6	4.8
29	33	59	74	66	---	55	57	23	2.9	0.34	e1.5	5.0
30	33	58	75	65	---	56	53	21	2.4	0.30	1.4	4.6
31	33	---	73	66	---	56	---	21	---	0.28	e1.1	---
Total	731	1,913	2,102	2,121	1,978	1,783	1,504	1,129	331.9	57.10	118.58	54.76
Mean	23.6	63.8	67.8	68.4	70.6	57.5	50.1	36.4	11.1	1.84	3.83	1.83
Max	50	185	78	76	112	65	62	48	21	9.0	13	5.1
Min	15	33	59	64	48	52	45	21	2.4	0.28	0.28	0.29
Ac-ft	1,450	3,790	4,170	4,210	3,920	3,540	2,980	2,240	658	113	235	109

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2011^Z, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	46.5	65.8	71.4	81.1	91.6	116	108	150	158	37.5	28.9	35.3
Max	426	848	490	292	240	473	579	1,022	1,054	167	117	266
(WY)	(1969)	(1972)	(1972)	(1972)	(2005)	(1973)	(1997)	(1977)	(1965)	(1967)	(1996)	(1970)
Min	0.35	4.97	22.4	31.0	37.0	23.0	3.90	1.39	0.34	0.02	0.02	0.00
(WY)	(1976)	(1967)	(1967)	(1977)	(1981)	(1967)	(1968)	(1966)	(1966)	(1970)	(1980)	(1983)

07228000 Canadian River near Canadian, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1965 - 2011 ^z	
Annual total	29,243		13,823.34			
Annual mean	80.1		37.9		82.3	
Highest annual mean					190	1972
Lowest annual mean					35.4	1981
Highest daily mean	722	Apr 18	185	Nov 12	12,700	Oct 9, 1968
Lowest daily mean	11	Sep 7	0.28	Jul 31	0.00	Oct 11, 1964
Annual seven-day minimum	13	Sep 2	0.31	Sep 9	0.00	Oct 11, 1964
Maximum peak flow			269	Nov 12	38,900	Oct 9, 1968
Maximum peak stage			2.92	Nov 12	9.83	Apr 15, 1973
Annual runoff (ac-ft)	58,000		27,420		59,650	
10 percent exceeds	145		71		144	
50 percent exceeds	64		41		46	
90 percent exceeds	16		0.71		1.8	

^z Period of regulated streamflow.

